

**We claim:**

1. Membrane active polyanions comprising hydrophobic esters and/or amides of polymaleic acid homopolymers.
2. A process for delivering a biologically active compound to a cell comprising associating the biologically active compound and the polymer of claim 1 with the cell.
3. The process of claim 2 wherein the biologically active compound is non-covalently associated with the polymer.
4. The process of claim 2 wherein the biologically active compound is covalently linked to the polymer
5. Membrane active polyanions comprising styrene-maleic anhydride-based random copolymers.
6. The polymer of claim 5 wherein hydrophobic groups are covalently linked to anhydride monomers in the polymer.
7. The polymer of claim 6 wherein the hydrophobic groups are selected from the list consisting of: hydrophobic esters and hydrophobic amides.
8. The polymer of claim 7 wherein a functional group is covalently linked to an anhydride monomer in the polymer.
9. A process for delivering a biologically active compound to a cell comprising associating the biologically active compound and the polymer of claim 5 with the cell.
10. The process of claim 9 wherein the biologically active compound is non-covalently associated with the polymer.
11. The process of claim 9 wherein the biologically active compound is covalently linked to the polymer.
12. Membrane active polyanions comprising vinyl ether-maleic anhydride-based alternating copolymers.
13. The polymer of claim 12 wherein the vinyl ether is selected from the group comprising alkyl vinyl ether and aryl vinyl ether.
14. The polymer of claim 13 wherein the alkyl vinyl ether is selected from the group consisting of: propyl vinyl ether and butyl vinyl ether.

15. The polymer of claim 12 wherein hydrophobic groups are covalently linked to anhydride monomers in the polymer.
16. The polymer of claim 15 wherein the hydrophobic groups are selected from the group consisting of: hydrophobic esters and hydrophobic amides.
17. The polymer of claim 12 wherein a functional group is covalently linked to an anhydride monomer in the polymer.
18. A process for delivering a biologically active compound to a cell comprising associating the biologically active compound and the polymer of claim 12 with the cell.
19. The process of claim 18 wherein the biologically active compound is non-covalently associated with the polymer.
20. The process of claim 18 wherein the biologically active compound is covalently linked to the polymer.